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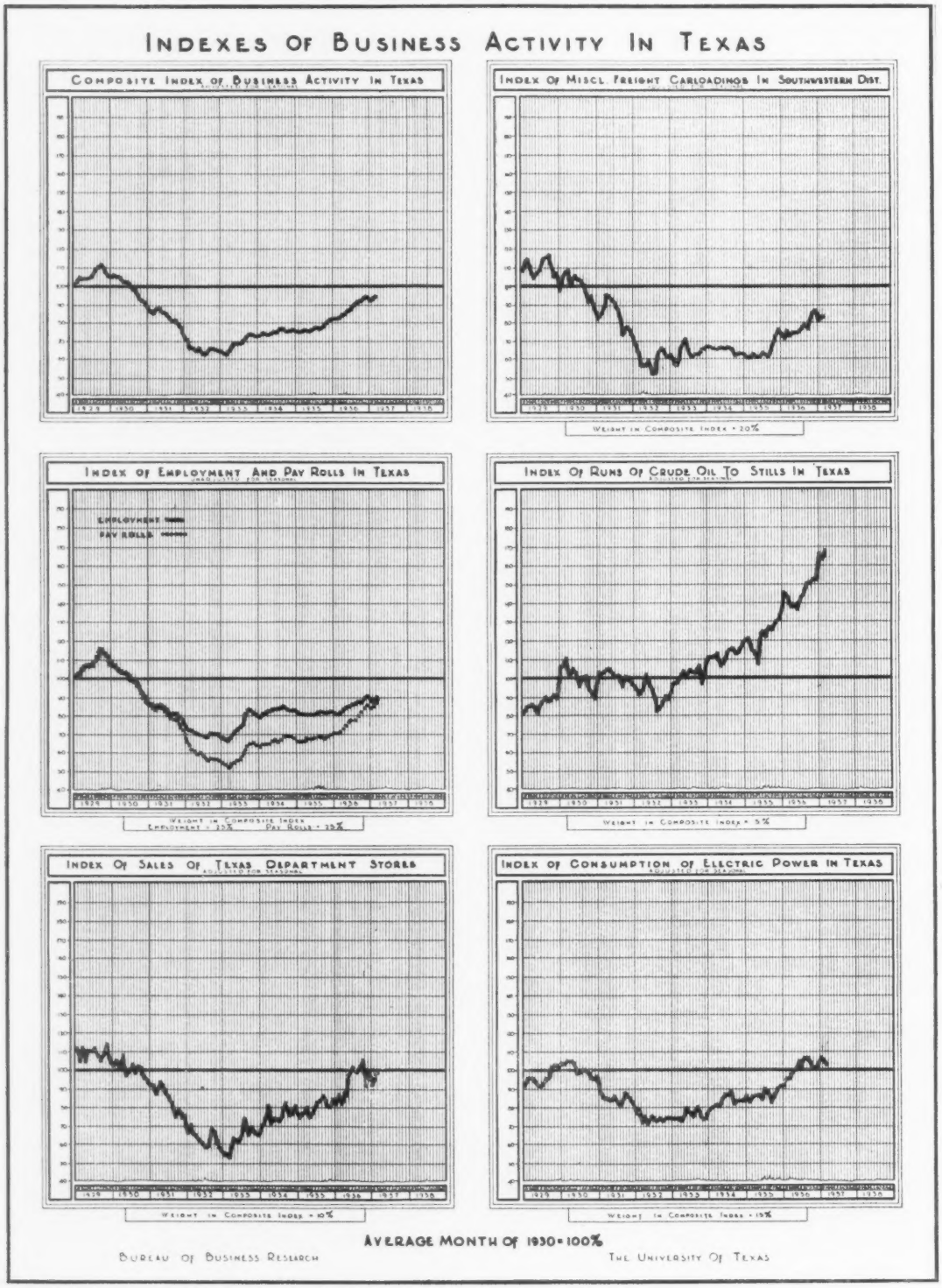
INDEXES OF BUSINESS ACTIVITY IN TEXAS
COMPOSITE INDEX OF BUSINESS ACTIVITY IN TEXAS
INDEX OF MISCL. FREIGHT CARLOADINGS IN SOUTHWESTERN DIST.
WEIGHT IN COMPOSITE INDEX = 20%
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INDEX OF SALES OF TEXAS DEPARTMENT STORES
WEIGHT IN COMPOSITE INDEX = 10%
INDEX OF CONSUMPTION OF ELECTRIC POWER IN TEXAS
WEIGHT IN COMPOSITE INDEX = 15%
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938
AVERAGE MONTH OF 1930=100%
BUREAU OF BUSINESS RESEARCH
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Business Review and Prospect

Industry and trade in the nation at large still maintain a wide margin of gain over the corresponding period last year. *Barron's* index for March reached 85.8 per cent of normal, compared with 71.2 per cent last year, representing an increase of 20 per cent. The April 19 issue of *Barron's*, however, shows a decline in the index to 83.6, but it is more than likely that this recession is temporary, reflecting the recent labor disturbances, and that the upward trend of the index will soon be resumed.

It is significant, however, that the March index of per capita physical production and trade as represented by *Barron's* must increase nearly 17 per cent from present levels before reaching the trend line established from 1899 to 1931. To reach the level attained from 1925 to 1930 the current index will need to rise more than 25 per cent. Thus it is clear that the Nation has some distance to go before emerging fully from the depression and considerably further before achieving genuine prosperity.

Building construction still remains far below what it was in 1928, although the country then had almost 10 million fewer people than it has now. The value of contract awards during the first two months of 1937 was less than half the total for the similar period in 1928, and residential building was only 32 per cent of what it was that year on the same basis of comparison. Costs of building have risen sharply during recent months, and there is real danger that unless general buying power increases proportionately the construction industry may remain far below normal for an indefinite period of time.

Texas Business

Texas business showed a somewhat smaller percentage improvement over March last year than did the country as a whole. This Bureau's composite index for March was 95.1 compared with 83 last year, a gain of nearly 15 per cent. There also was a slight gain over the preceding month.

Each component of the index showed a substantial gain over last year; but, compared with February, the indexes of electric power consumption and miscellaneous freight car loadings showed slight declines, while those of employment, pay rolls, runs of crude oil to stills, and department store sales showed moderate increases.

Index of Farm Cash Income

The index of farm cash income in Texas for March was 63 per cent above that for March last year and 9 per cent above that of the preceding month.

Farm cash income averaged 41 million dollars monthly during the base period (1928–32), but normally only about 33.1 per cent of this amount, or $13,600,000, is received during March. This year March receipts totalled $18,600,000, bringing the index of farm cash income for the State up to 136.5, which compares with the index of 125.1 in February and 83.5 in March 1936.

The following table gives the indexes of farm cash income for each of the eleven crop reporting districts of the State, for the four counties in the Lower Rio Grande Valley, and for the State as a whole:

	Index of Agricultural Cash Income		
District	March 1937	March 1936	February 1937
1-N	112.6	67.7	99.6
1-S	133.4	74.3	108.7
2	119.3	112.7	93.0
3	180.1	152.1	156.8
4	131.3	114.7	104.0
5	113.1	119.4	119.1
6	96.6	100.8	122.0
7	142.6	84.7	99.6
8	119.3	95.1	122.5
9	121.1	94.5	223.7
10	227.2	50.8	224.7
10-A*	250.7	39.8	245.8
State	136.5	83.5	125.1

*Included in district 10.

NOTE: See maps, pages 5 and 6 of the issue of March 27, 1937, showing the crop reporting districts.

Compared with March 1936 the districts showing the greatest increases in the indexes of farm cash incomes are those in which livestock and livestock products constitute the dominant sources of income. The four counties in the Lower Rio Grande Valley shown independently as 10-A and also as part of district 10 constitute a distinctive region, and here the gain in March income was the result of good crops and fair prices of vegetables and citrus fruit, especially of citrus fruit.

Farm cash receipts in the Lower Rio Grande Valley during the first three months this year totalled over $11,500,000, compared with $3,900,000 during the corresponding period a year ago. During the entire year of 1935 receipts totalled only $11,860,000 in this region, which illustrates the sharp agricultural recovery which is taking place in this area. Included in the farm cash receipts of the Lower Rio Grande Valley are the monthly purchases of fruits and vegetables by the canning companies. The excellent coöperation which the Bureau receives from these companies makes the inclusion of this item possible.

F. A. BUECHEL.

For Other Texas Data, See Statistical Tables at the End of This Publication

Financial

The past month has witnessed several sharp declines in the prices of speculative commodities. In each instance, a major factor in the decline has been a widespread rumor to the effect that President Roosevelt was on the verge of ordering a reduction in the Treasury's buying price for gold. Such action would undoubtedly cause an immediate drop in the prices of export-import goods and through these prices exercise a somewhat deflationary effect on commodity prices in general. Because of the current interest in a possible upward revaluation of the gold dollar, it may be of some utility to examine the situation briefly.

Three possible reasons for lowering the Treasury's buying price for gold can be advanced: to correct the present undervaluation of the dollar in the foreign exchange market, to check commodity price inflation, and to relieve the Treasury of the growing burden of carrying the "inactive" gold fund. Neither the first nor the second reason appears to be a probable cause for action just now. Despite the almost uninterrupted flow of gold into the United States since February 1934, the Administration has given no indication that it believes the dollar to be undervalued, except to express some concern over the growing foreign balances in the security and money markets. Further, it is most unlikely that the Administration desires to bring about any general commodity price deflation at the present time.

The burden of carrying the inactive gold fund undoubtedly is a factor favoring a reduction in the buying price of gold. It will be recalled that the inactive gold fund was established last December in an effort to check the growth in commercial bank excess reserves. In brief, the plan requires the Treasury to borrow funds through note issues with which to purchase imported gold. The amount borrowed from the market offsets the amount paid into the market, leaving member bank reserve balances unchanged. The gold thus bought is then "sterilized" in the sense that the Treasury merely holds the metal, refraining from selling it to the Federal Reserve Banks as had been the practice in the past. Thus the gold does not get into the Reserve System structure at all.

In effect, therefore, the Treasury is continuously borrowing money with which to accumulate imported gold. Since the policy was adopted, the inactive gold fund has grown to considerably more than $500,000,000, increasing by $78,000,000 during the week ending April 14. The interest cost to the Treasury obviously is a heavy and growing burden. A reduction in the Treasury's buying price for gold would, of course, slow down and perhaps stop the gold inflow, thus relieving the pressure on the Treasury.

It seems very unlikely that the price of gold will be lowered just to accomplish this purpose. In the first place, under the Gold Reserve Act of 1934 the President could not raise the weight of the gold dollar above 60 per cent of its old weight. It is now 59.06 per cent of its old weight; thus the only reduction possible without changing the law would be from $35.00 an ounce to $34.45. In the second place, the price of gold could not be reduced without exercising a deflationary influence on commodity prices in general, which would be extremely unpopular politically. In the third place, the Treasury could be relieved of carrying the burden of the inactive gold fund much more simply, namely, by abandoning the inactive gold fund policy.

It seems probable that this latter procedure will prove to be the eventual solution. Not only would abandonment terminate Treasury borrowing to buy gold, but it would enable the Treasury to recover the amounts already borrowed for this purpose by a simple sale of the inactive gold fund to the Federal Reserve Banks. True, this would broaden the base for credit expansion, but, in view of the prospective sharp reduction of excess reserve balances, such action would not appear (to the public) to be so dangerous as it might have last December. Accordingly it seems most unlikely that the weight of the gold dollar will be increased in the near future.

The short-term money market continues to show slight evidences of tightening. Yields on prime commercial paper, 4 to 6 months maturity, were advanced from ¾ to 1 per cent in mid-March. Similarly, during the past month the yield on 90 day banker's bills has gradually advanced from 5/16 to 9/16 per cent.

High grade bond prices, after an almost unbroken decline of some three months, have shown some recent tendency to rally, the Dow-Jones average of 40 high grade bond prices rising from 100.47 on April 12 to 101.81 on April 20. The average of 14 long-term Treasury issues, after reaching a low of 103.3 on April 10, has shown a somewhat similar recovery tendency. It is interesting to note that, during the recent period of weakness in Government bond prices, the Government bond market received substantial artificial support. During March, the Treasury bought $119,553,000 of its own securities using trust funds such as F. D. I. C. assessments for that purpose. In addition, the Federal Reserve Banks bought $103,000,000 of Government bonds in the open market during March, switching from notes to bonds. In the first two weeks of April, the Reserve Banks purchased an additional $52,000,000 of such bonds, about $29,000,000 of which represented an increase in total open market holdings.

Commercial bank earning assets changed rather sharply during the past eight weeks. The reporting member bank holdings of Government obligations dropped from $10,337,000,000 on February 10 to $9,709,000,000 on April 7. Over the same period, "other loans," chiefly for commercial purposes, expanded from $4,117,000,000 to $4,407,000,000, continuing the trend which has been in evidence for some 15 months. Excess reserve balances of all member banks on April 14 were estimated at $1,630,000,000. These excess reserves, of course, will be sharply reduced on May 1, when the increased legal reserve requirements go into effect.

J. C. Dolley.

Cotton

There are many rumors these days about many things, but there is one the cotton growers in particular should consider with care. It is the rumor that the Treasury may reduce the dollar price of gold. A reduction in the dollar price of gold is in reality nothing more nor less than increasing the gold content of the dollar, unless the Government chooses to establish the value of the dollar independent of gold. In other words, cotton now at 13.50 cents is worth 1.85 grains of gold when the Government is paying $35.00 for 480 grains or an ounce of gold. If the Government were to reduce the price it pays for gold from $35.00 per ounce to $30.00, it would be the equivalent of increasing the gold content of the dollar from 13.7 grains, its present gold value, to 16 grains; and that would tend to reduce the dollar price of cotton from 13.50 cents to about 11.50 cents, or nearly two cents, without any change in the gold or world price of cotton. In other words, when the dollar contains 13.7 grains of gold, one grain equals 7.3 cents, and if the gold content of the dollar should be increased to 16 grains by a reduction of the dollar price to $30.00 an ounce, a grain would then equal only 6.25 cents. Obviously it will not be to the best interest of the cotton growers to increase the gold content of the dollar.

This spring has afforded another demonstration that the sale of cotton is bullish on cotton prices rather than bearish. The average price of middling 7/8-inch spot cotton in December prior to the sale of any Government cotton was about 12.50 cents, whereas now the Government has marketed about 1,500,000 bales of loan cotton and the price is about 14 cents. Is not that another way of saying that the only effective way to take cotton off the market once it is produced is to consume it? If a burdensome surplus should accumulate sometime in the future, would it not be better for all concerned to subsidize the cotton growers to sell it into consumption rather than bank up the surplus over the market through Government loans at or above market prices?

Many bad things are now being said about the quality of Texas cotton. Indeed the quality is far below what Texas is capable of producing to best advantage, but it is both unjust and unwise to overlook the fact that adverse weather conditions were perhaps the major cause of the unsatisfactory quality of Texas cotton last year. A good season may completely restore the quality, especially when aided by a strong sentiment such as exists now to plant superior seed. In other words, there is no ground on which to base a belief that the quality of the Texas crop of 1936 is typical and will be repeated in 1937, or any reason for those who have been buying and using high quality Texas cotton to go elsewhere for it in 1937.

The outlook for cotton is not as bright as it might be. It is generally conceded that there will be an increase of nearly 15 per cent in the acreage devoted to cotton in the United States. It is also very probable that the rest of the world will likewise have another substantial increase in cotton acreage. A much larger production of American cotton as well as world cotton is possible. The yield per acre will decide.

A. B. Cox.

COTTON BALANCE SHEET

Total supplies of cotton in the United States April 1 were only 8,009,000 bales, as compared with 8,758,000 bales last year and 10,072,000 bales two years ago. The decrease of supplies of cotton in the United States and of American cotton in European ports and afloat to Europe during the past 12 months, April 1, 1936 to April 1, 1937, was 709,000 bales.

Calculated changes in the index price of cotton based on these changes in supply indicate an advance in the index price from last year of 123 points over the index price of April 1 last year. When changes in the index number are taken into consideration, the calculated price of middling 7/8-inch spot cotton in New Orleans is about 13.94 cents. The same price calculated on the basis of average percentage changes is 14.07 cents.

SPINNERS MARGIN

Spinners ratio margins widened during March to 182 compared with 179 in February and 168 in March last year.

The pence margin in Manchester averaged 6.45d during March, the highest on record, compared with 5.65d during February and 4.26d for March 1936.

The above margins indicate an exceptional demand for cotton in England. It is probable that a considerable part of this is due to preparation for war orders and may not be typical of the world situation.

Directory of Texas Manufacturers Supplement

A supplement to the 1936 edition of the *Directory of Texas Manufacturers* has been compiled and issued in mimeographed form. This supplement, which applies to the name section only, includes the names of the new manufacturing plants that have been established since this time last year and omits from the lists those industries which have been closed during the year.

As both manufacturers and consumers are increasingly aware of the value of having accurate information regarding the State's industrial development, it is important that the *Directory of Texas Manufacturers* be kept up to date. The 1936 edition with the supplement just compiled comprises a complete source of information regarding the names and locations of manufacturing industries in Texas. The 1937 supplement is sent without charge to all those who now have the directory and will be attached without additional charge to all copies distributed during the remainder of this year.

Along with the increase in the number of manufacturing plants in Texas during the last three years, there has also been a corresponding increase in the number of distributors located in the State who represent firms which manufacture products outside of Texas. Out-of-

State consumers of Texas-made goods find the Directory a reliable guide for information on products manufactured in Texas, and industrialists interested in the location of new plants may obtain valuable data through the Directory concerning the size, number, distribution area, and location of similar plants already established in this State.

It is the plan of the Bureau of Business Research to issue a complete edition of the *Directory of Texas Manufacturers* every two years. So many new plants have been put into operation during the last twelve months, however, and so many factories have been reopened that a new list of the manufacturing plants showing the changes in name and location of plants is considered necessary at this time.

Although the 1938 Directory will follow the same general outline as the 1936 edition, plans are being made to include a separate list of the distributors, wholesalers, and jobbers having offices in the State, as well as a complete list of the manufacturers producing goods in Texas. The names, locations, and home offices of all distributors, wholesalers, jobbers, and manufacturers will be shown in the separate groups.

The Southwest in National Economy

In the Nature of the Country Lies the Destiny of Its People

GENERAL PERSPECTIVE

It is apparent to student and casual observer alike that the regional economy of the Gulf Southwest differs markedly from that of other major regions of the Nation. At the present time the Gulf Southwest with its vast supplies of raw materials of diverse groups stands out as the last industrial frontier of the United States. Owing to its large reserves of petroleum and natural gas, its vast deposits of non-metallics, and its huge capacity for growing agricultural, livestock, and timber products, and its geographic situation with reference to the Gulf of Mexico with the consequent access to the low-cost water transportation, the Gulf Southwest is much more than the last industrial frontier of the Nation—it is indeed more than an outstanding unit in the national economy. It is a section which because of the inherent forces of its regional economy may serve again as the pivot about which no little portion of the national economy may revolve.

Historically, the drama of the peopling of the Gulf Southwest, the clashes between the Hispano-American and the Anglo-American groups, the expansion of the range industry from its home in the cactus and chaparral plains of South Texas, the extension of railways into and through the Southwest, the geographic shift of cotton culture from east of the Mississippi River, the spectacular rise of the oil industry, the more recent growth to magnificent proportions of the natural gas industry, and, more recently still, the migration of heavy chemicals into the Gulf Southwest—all of these are expressions of the growth and progressive change of a regional economy in a section whose physical environment and whose combinations of natural resources set it apart from all other major regions of the United States, or of the world for that matter.

The distinctive natural characteristics and resources of this major region have in the sequence of economic development from the time of the *Conquistadores* to the present impressed themselves in no uncertain terms upon the past and present economy of the Gulf Southwest. Nature has provided in the Gulf Southwest the bases on which to build a cotton kingdom greater than the historic cotton belt east of the Mississippi; physical geography has made possible the development of a livestock empire in this region; geology has laid in its diverse sedimentary strata, which extend to great depths throughout wide areas, not only the vast supplies of petroleum, the magnificent reserves of natural gas, but also the varied types of non-metallic resources which can well serve the chemical and the construction industries for generations to come. Eastward from the Black Prairies to the Mississippi is a vast area well suited by nature to supply rapidly growing forest raw materials for the pulp and paper industry that has already begun in a substantial manner its trek toward the Gulf of Mexico. It may be noted that the advantages of the Gulf pulp and paper plants include proximity to abundant and low-cost raw materials, adequate supplies of power and fuel, with the consequent lower production costs, and the lower freight rates to the consuming markets.

Kraft pulp production in the United States has increased 260 per cent in the past decade. Several new kraft mills are now under construction and it has been reported that 32 kraft mills will be in operation in the South by the end of 1938. It is also reported that an entirely new process for using bleached sulphate pulp in the manufacture of magazine and book paper has been developed by the Champion Paper and Fiber Company. In this process the strength of the long fibers of the sulphate pulp is retained even after being subjected to the bleaching process. Champion's new pulp mill near Houston, operating with an initial capacity of 165 tons daily, is designed to supply the bulk of the pulp requirements of the Champion paper plant at Hamilton, Ohio.

One significant turning point in the economic history of the Gulf Southwest had been reached by 1900. Up to that period the economy of this region has been centered almost entirely upon the production of agricultural, range, and forest raw materials for the constantly expanding markets outside this region. Since 1900 agricultural and range production has expanded both geographically and in volume and diversity of products for the Southwest as a whole.

But since the turn of the century it has been petroleum and, more lately, natural gas that have served to open new economic horizons in the broadening economy of the Gulf Southwest. Petroleum refining has become the outstanding manufacturing enterprise in this section, and in petroleum refining the Gulf Southwest easily leads the

nation. While most of the oil products and natural gas of this region are marketed outside the Gulf Southwest, the extensive growth of these industries in this section—exploration and production, transportation, refining, and marketing—has created large and constantly expanding markets in the Southwest for various types of industries outside the region. Aside from the fact that petroleum has become a key resource in the national economy of industrial nations, the mere facts of the expansion of this industry in the Gulf Southwest and the potentialities of its future entitle this region to major consideration in any analysis of the broadening economy of the United States.

That petroleum has attained the important position as a key resource in the national economy of industrial countries is now a well-recognized fact; that natural gas is to be regarded as a key resource in the further building of the regional economy of the Gulf Southwest, particularly during the next quarter of a century, is not so widely recognized in Texas, despite the fact that Texas possesses the outstanding natural gas resources of the North American continent. It would be difficult indeed to exaggerate the importance of natural gas, which lives up to its designation as the perfect fuel, in the potential development of those industries which can mean so much to the economy of this region in the near future. Natural gas may be considered the key factor in the migration of the heavy chemicals into the Gulf Southwest which has been taking place during the past few years.

Thus far, the vast resources of such non-metallic resources as salt, cement raw materials, and gypsum, which abound in the Southwest, have scarcely been scratched; in addition, there are the potential elements for the production of glass, lime, and clay products, all of which use natural gas advantageously. Moreover, the promise of a considerable development of the potash resources of the Permian Basin in West Texas and southeastern New Mexico appears justified in the light of the exploration and development that have taken place to date.

Petroleum and the Southwest

In 1936 the six states of the Gulf Southwest—Texas, Oklahoma, Louisiana, Arkansas, New Mexico, and Kansas—accounted for nearly 74 per cent of the total petroleum output of the United States. These states comprise the fields usually designated as the Mid-Continent and the Gulf Coast. Omitting Kansas, the other five states produced nearly 70 per cent of the nation's output for last year. Texas alone accounted for nearly 40 per cent of the total production of the country. It may be recalled that, to date, the three states of California, Texas, and Oklahoma have produced nearly 72 per cent of total oil output of the United States from the beginning of the oil industry. Prior to January 1, 1938, Texas undoubtedly will take the lead in total output of the oil producing states; in 1936 Texas produced 6 million barrels more than the combined output of California and Oklahoma.

Drilling operations in 1936 are indicative of current trends in the concentration of the oil industry upon the Southwest. Of nearly 24,000 wells completed in 1936 (which was more than double the number in 1933), 69 per cent were in the Mid-Continent and Gulf Coast—but of the total, Texas had 52.4 per cent; Oklahoma, though second, had only 12 per cent.

But it is in proven reserves of petroleum that the Gulf Southwest really shows its leadership in oil. Of the estimated proven reserves of somewhat more than 13 billion barrels as of January 1, 1937, Texas and the other states of the Gulf Southwest had nearly 71 per cent. Texas alone was estimated to have 50 per cent of these reserves; California was estimated to have somewhat less than 23 per cent, and Oklahoma less than 9 per cent of the reserves of the United States. The Rocky Mountain states, the Mid-West and the Eastern fields were estimated to have all together only 7 per cent of the total known reserves.

Oil activity in 1937 may surpass that of 1936; oil production in the United States during 1936 reached the highest level in history. It is reasonably certain that a very large proportion of the future activity will occur in the Gulf Southwest and that Texas activity will be far out in the lead. Truly, this region may be considered as the oil empire of the nation.

Owing to the broad economic significance of petroleum to Texas, and to the fact that oil has crystallized national attention upon Texas as nothing else has, the history of oil production in the State is here briefly summarized. Dr. Robert T. Hill, in *The Dallas News* of July 3, 1932, wrote: "Almost since the white man first came it was known that oil and gas exuded from the ground at the springs of Sour Lake, in Hardin County, Texas. Strange, indeed, is the fact that it took mankind nearly 75 years to ascertain that these springs were but manifestations of vastly greater quantities of deeper-seated oil.

"The first discovery of true oil sands was near Nacogdoches, before the Civil War. The oil was from one of the sands of the Claiborne (Tertiary) at a horizon above the one next to be described. . . . A sand in the upper Cretaceous, probably the Corsicana (Wolfe City?) sand was discovered at Corsicana in the early 80's. This sand sometimes produced as much as 15 barrels daily per well, but the average did not exceed 4. The little field was pumped for years, and was looked upon as a Texas wonder. The people of the State for a time neither looked for nor desired another. The fact that the quality of the oil equalled that of the best Pennsylvania crude and yielded a good grade of kerosene was all sufficient.

"Since the early oil discovery at Corsicana other oil horizons from sands occupying various positions in the geologic column of Texas have been found. These started from the nearly earliest to the nearly newest rocks in the various parts of the State. Almost as early as the discovery of oil in the Cretaceous at Corsicana the material was found in Pennsylvanian strata at Brownwood, where for years it was merely looked upon as a curiosity or sometimes sold as axle grease. Long after the finding of oil in the one horizon of the Upper Cretaceous section, which put Corsicana on the map, oil was discovered in other horizons of the same group of rocks after various intervals of placidity.

"Prior to the year 1900 the use of oil was chiefly for lubricants and kerosene. Then a wonderful thing hap-

pened to revolutionize the industry of the world. This event was the discovery of the production from the peculiar salt domes which, unknowingly to mankind, lay beneath the Coast Plain. The discovery of Spindletop by Captain Anthony F. Lucas was an epoch-making event in the world's history, for it changed the oil industry from the half-pint kerosene lamp status of consumption to a tank car fuel basis for factories, locomotives and ocean steamers."

Concerning the Spindletop discovery, Alexander Deussen, a well-poised student of the oil industry and of the geology of the State, in an address in 1934 at the Quarter-Centennial of the Division of Natural Resources, The University of Texas, said: "The momentous discovery at Spindletop by Captain Lucas was on January 10, 1901. I still have a vivid recollection of the impression this discovery made at the time and of the tremendous boom which immediately followed. As is usual, however, in these cases, its significance and importance were little realized at the time. Viewed in retrospect it was an event of outstanding importance in the history of Texas—one that compares with such major episodes as the adoption of the Texas Declaration of Independence, the Battle of San Jacinto, annexation to the United States, building of the first railroad, secession from the Union, and final conquest of the Indian. In the history of oil it must be ranked as of importance almost as great as the original Drake discovery in Pennsylvania in 1859. The Lucas discovery, of course, immediately stimulated intensive study of the geology of the Coastal Plain. It marked the beginning of that important branch of geology now referred to as salt dome geology—a branch not within the vision or expectation of any of the earlier investigators.

"It is interesting to note in this connection that in this same year, 1901, there appeared R. T. Hill's classic on the Cretaceous of Texas, in the Twenty-first Annual Report of the United States Geological Survey, the paper being entitled 'The Geography and Geology of the Black and Grand Prairies of Texas, with detailed description of the Cretaceous Formations and Special Reference to Artesian Waters.' This publication remains one of the notable and outstanding contributions to the geology of Texas, and it has not been possible since that time to add very much to Hill's classification, definition, and description of the Cretaceous deposits of Texas." *(The University of Texas Bulletin*, No. 3501, page 40.)

Shortly after the Spindletop discovery a number of other salt dome fields including Sour Lake, Batson and Saratoga were discovered. In 1904 oil was found in Clay County on what is now known as the Red River uplift. Other fields in this district include Electra, discovered in 1911, and Burkburnett in 1919. In the meantime, however, the Ranger field was discovered in 1917, creating the first big boom in Texas oil since the days of Spindletop in the early years of the century. The boom period in the Ranger country continued into the early 1920's. In 1918 natural gas was found in Potter County, and in 1921 oil was found in that country near Amarillo; although, it was not until 1925 that the oil possibilities of the Panhandle were given very serious consideration.

In 1920 oil was discovered at Mexia, and the opening up of fields at Currie, Richland, Powell, and Wortham followed in rapid order. In 1922 oil was discovered at Luling.

In 1917 in a paper on the Glass Mountains, the late Dr. J. A. Udden, then Director of the Bureau of Economic Geology of The University of Texas, suggested the possibilities of oil and gas in the southern portion of the Permian Basin. In 1921 drilling began in what is now the Big Lake field, where the discovery well was completed in May, 1923. Intensified explorations began, and in rapid order a number of fields were brought in, some of the better known of which include Yates, discovered in 1926, Winkler in 1926, and Hobbs, New Mexico, in 1928.

Attention during the past several years has increasingly centered upon production and potentialities in the eastern half of the State. The Lucas discovery at Spindletop and later discoveries had made known early in the present century the existence of the salt dome structures along the Gulf Coast. In 1910 the existence of the Sabine uplift in northeast Texas and northwest Louisiana was first pointed out and defined. On the western flank of this structure is the gigantic East Texas field. Just westward from the Sabine uplift is the East Texas embayment, or the Tyler trough, containing the interior salt dome district with which is associated the Van oil field.

Nearly four decades have elapsed since Spindletop was found. During the first two decades of the present century the Gulf Coast country did not attract any marked attention. In fact, from 1906 to 1913 production had declined substantially; 1914 witnessed the first increase in 8 years, and after 1914 production grew steadily until the early 1920's when large increases began to be important.

Geologic work was difficult owing to the fact that the Gulf Coast is an almost flat plain without indications at the surface of geologic structure: the surface everywhere is dominated by a sameness, which is broken only by the streams that cross it. "Yet," as Deussen has written, "beneath this all-pervading and featureless mantle is a structural picture not simple or regular as the surface implies, and a geologic story of intriguing episodes and stores of fabulous wealth which might well excite the cupidity of an ancient Midas."

The Texas Gulf Coast district, not including the Corpus Christi and Laredo districts, has produced to date nearly a billion barrels of oil, or slightly more than 20 per cent of the total production of the State. The largest total producing field is Spindletop with the Humble field a close second.

The largest producing field at present in the Gulf Coast district is Conroe where production rose from a thousand barrels in 1931 to 21 million in 1933, and which last year produced 15 million barrels.

About 1922 geophysical methods of exploration were introduced in the Gulf Coast with the use of the torsion balance. In 1924 the first seismograph survey was conducted in the Gulf Coast country. Prior to 1922 about 44 salt dome structures had been revealed by drilling operations. With the application of geophysical methods of exploration there began an intensive period of explora-

tion in the Coast territory which has resulted in the discovery of numerous hidden structures. Associated with the salt dome structures, but with great variations in each case, are oil and gas accumulations and the salt, sulphur, and gypsum deposits of the Gulf Coast territory.

Just as Texas is rapidly becoming the last hunting ground for big production in the Nation, it appears that the zone of territory bordering the Gulf Coast will become a main hunting ground for large production as an intensive program of very deep drilling gets well under way.

Summary

The periods of large expansion in Texas agricultural and range production obviously will not be repeated. Nor is it likely that oil booms comparable to those of Spindletop or Ranger or the more recent ones, such as East Texas, will be repeated.

Texas' proportion, however, in the total output of petroleum production of the Nation will undoubtedly increase beyond 40 per cent during the next decade. Texas has about 25 per cent of the petroleum refining capacity of the Nation, and it is possible that this proportion may increase. The critical question is, of course, how long will the petroleum reserves of Texas permit big production to continue in the State. Truly large production of petroleum in Texas has come about only within the past decade. It may be surprising to note that within the past 10 years, 1927–36, inclusive, that Texas has produced 3,309,076,000 barrels of oil—nearly 72 per cent of the State's total output of 4,614,819,000 barrels down to January 1, 1937. That is to say, the production of oil in Texas during the last 10-year period was nearly three times the total production in the State prior to 1927.

Prior to 1927 the State's annual production had been considerably less than 200,000,000 barrels. In 1917 Texas produced only 32,413,287 barrels; this production grew steadily, and in 1926 the State's production had risen to 166,916,000 barrels. During the 10-year period from 1917–26 inclusive, Texas produced a total of a little more than a billion barrels—less than a third of the total production during the following 10-year period from 1927–36.

During the five years from 1926 through 1930 more oil was discovered in the United States than in any other

RETAIL SALES OF INDEPENDENT STORES IN NEW MEXICO, OKLAHOMA, AND TEXAS

	March 1937				Year-to-date 1937		
	Number of Firms Reporting	Dollar Sales	Percentage Change in Dollar Sales from March 1936	Percentage Change in Dollar Sales from Feb. 1937	Number of Firms Reporting	Dollar Sales	Percentage Change in Dollar Sales from Year-to-Date 1936
TOTAL (New Mexico, Oklahoma, and Texas Combined)	1,082	$18,080,384	+ 13.0	+ 28.5	973	$ 43,652,775	+ 6.9
NEW MEXICO	66	710,723	+ 16.3	+ 38.3	58	1,746,084	+ 12.2
OKLAHOMA	256	2,668,341	+ 8.2	+ 25.1	230	6,472,794	+ 0.5
TEXAS	760	14,701,320	+ 13.7	+ 28.7	685	35,433,897	+ 7.9
TEXAS STORES GROUPED BY LINE OF GOODS CARRIED:							
APPAREL	105	2,033,829	+ 29.3	+ 32.3	97	4,975,310	+ 19.8
Family Clothing Stores	28	384,858	+ 20.9	+ 48.8	26	805,480	+ 10.1
Men's and Boys' Clothing Stores	41	684,279	+ 33.2	+ 34.9	38	1,787,693	+ 20.7
Shoe Stores	12	141,543	+ 23.1	+ 69.8	11	290,287	+ 16.3
Women's Specialty Shops	24	823,049	+ 31.4	+ 19.5	22	2,091,850	+ 23.6
AUTOMOTIVE	110	4,418,018	+ 6.6	+ 44.6	104	9,878,376	− 2.1
Filling Stations	24	98,208	+ 6.4	+ 7.2	24	277,190	+ 8.7
Motor Vehicle Dealers	86	4,319,810	+ 6.6	+ 45.8	80	9,601,186	− 2.3
COUNTRY GENERAL AND FARMERS' SUPPLIES	82	523,410	+ 20.5	+ 19.7	79	1,341,447	+ 12.4
DEPARTMENT STORES	49	4,915,947	+ 16.1	+ 28.3	48	12,313,071	+ 11.8
DRUG STORES	145	463,298	+ 3.6	+ 2.3	135	1,251,409	+ 4.0
FOOD	126	876,796	+ 17.6	+ 10.5	113	2,120,929	+ 8.8
Grocery	33	188,985	+ 17.4	+ 12.6	30	498,869	+ 8.6
Grocery-and-Meat Stores	93	687,811	+ 17.7	+ 9.9	83	1,622,060	+ 8.9
FURNITURE AND HOUSEHOLD	29	416,752	− 1.6	+ 10.4	28	1,117,396	+ 5.3
Furniture Stores	19	325,194	− 1.4	+ 6.6	18	882,020	+ 5.6
Household Appliance Stores	5	74,630	− 4.9	+ 30.2	5	190,422	+ 4.2
Other Home Furnishings Stores	5	16,928	+ 10.8	+ 11.3	5	44,954	+ 4.6
JEWELRY	38	155,006	+ 24.8	+ 12.0	9	126,301	+ 9.5
LUMBER, BUILDING, AND HARDWARE	58	794,541	+ 13.5	+ 13.9	52	1,971,264	+ 14.8
Farm Implement Stores	3	15,543	− 24.6	− 44.5			
Hardware Stores	30	345,809	+ 12.8	+ 10.2	29	949,550	+ 15.1
Lumber and Building Material Dealers	25	433,189	+ 16.1	+ 21.7	23	1,021,714	+ 14.6
RESTAURANTS	14	66,445	+ 6.5	+ 9.0	14	191,456	+ 3.6
ALL OTHER STORES	4	37,278	− 5.6	+ 5.1	6	146,938	− 1.0
TEXAS STORES GROUPED ACCORDING TO POPULATION OF CITY:							
All Stores in Cities of—							
OVER 100,000 POPULATION	174	8,316,240	+ 14.8	+ 24.8	156	20,594,811	+ 11.4
50,000–100,000 POPULATION	62	1,220,000	+ 19.6	+ 31.4	61	3,015,433	+ 12.1
2,500–50,000 POPULATION	339	3,993,950	+ 13.2	+ 38.3	301	9,069,651	+ 1.7
LESS THAN 2,500 POPULATION	185	1,171,130	+ 3.3	+ 25.0	167	2,754,002	+ 0.8

NOTE: Prepared from reports from independent retail stores to the Bureau of Business Research, coöperating with the United States Department of Commerce.

like period of time. That the discoveries of this 5-year period were almost as great as the total for the United States during the 20-year period from 1906 through 1925 is rather difficult to visualize. Moreover, the amount of oil discovered in Texas from 1926 through 1930 was nearly 57 per cent of the total discovered in the United States during that period. Since 1930 there has been a marked falling off in the rate of discovery, but nearly half of the oil discovered in the United States during the 5-year period, 1931–35, was found in Texas. During

MARCH RETAIL SALES OF INDEPENDENT STORES IN TEXAS

	March 1937				Year-to-date 1937		
	Total Number of Firms Reporting	Dollar Sales	Percentage Change in Dollar Sales from March 1936	Percentage Change in Dollar Sales from Feb. 1937	Number of Firms Reporting	Dollar Sales	Percentage Change in Dollar Sales from Year-to-date 1936
TOTAL TEXAS	760	$14,701,320	+ 13.7	+ 28.7	685	$35,433,897	+ 7.9
TEXAS STORES GROUPED BY PRODUCING AREAS:							
DISTRICT 1-N	44	552,313	+ 9.8	+ 37.7	40	1,360,125	+ 5.3
Amarillo	13	228,654	+ 8.1	+ 25.3	11	597,283	+ 12.4
Pampa	4	148,948	+ 7.1	+ 69.4	4	349,103	− 4.5
Plainview	7	77,713	+ 23.5	+ 56.7	6	187,556	+ 2.6
All Others	20	96,998	+ 8.6	+ 19.5	19	226,183	+ 6.8
DISTRICT 1-S	20	535,163	+ 34.2	+ 36.3	17	914,239	+ 10.3
Big Spring	4	101,197	+ 46.2	+ 14.4	4	263,671	+ 29.6
Lubbock	12	396,464	+ 32.1	+ 50.2	9	515,667	− 0.9
All Others	4	37,502	+ 27.9	− 6.7	4	134,901	+ 28.6
DISTRICT 2	64	550,591	+ 6.6	+ 53.5	56	1,185,646	− 7.5
Abilene	10	106,724	+ 11.9	+ 31.0	8	253,413	+ 11.3
Vernon	5	22,280	− 4.1	+ 27.3	5	60,224	− 14.0
Wichita Falls	6	123,154	+ 4.2	+ 83.0	6	268,717	− 12.9
All Others	43	298,433	+ 6.7	+ 55.0	37	603,292	− 10.7
DISTRICT 3	21	153,313	+ 5.2	+ 23.8	18	381,386	− 2.8
Brownwood	4	57,140	+ 5.9	+ 29.1	3	140,338	− 6.5
All Others	17	96,173	+ 4.8	+ 20.8	15	241,048	− 0.5
DISTRICT 4	191	5,178,390	+ 12.2	+ 20.3	180	13,072,958	+ 9.0
Cleburne	9	48,201	+ 17.6	+ 15.4	9	125,044	+ 7.0
Corsicana	9	78,128	+ 15.0	+ 35.6	9	186,448	+ 13.3
Dallas	51	2,931,313	+ 14.1	+ 16.6	45	7,544,111	+ 12.1
Denison	4	23,615	− 12.7	− 12.5	4	68,513	+ 13.2
Fort Worth	22	1,159,889	+ 7.6	+ 20.6	21	2,895,016	+ 7.4
Paris	4	144,135	+ 41.6	+ 29.7	3	332,958	+ 20.2
Sherman	6	35,562	+ 33.8	+ 46.9	5	77,501	+ 18.0
Taylor	10	117,963	+ 15.7	+ 57.0	10	256,911	− 5.6
Temple	7	47,768	+ 7.4	+ 20.0	7	125,301	+ 2.7
Waco	13	264,039	+ 19.0	+ 36.0	13	641,160	+ 10.8
All Others	56	327,777	− 2.0	+ 26.7	54	819,995	− 10.0
DISTRICT 5	75	915,560	+ 2.3	+ 39.6	69	2,075,140	− 2.9
Bryan	8	70,869	+ 5.7	+ 9.8	7	171,027	+ 3.1
Longview	6	70,234	+ 8.4	+ 49.0	5	145,002	− 7.7
Marshall	5	48,081	+ 25.4	+ 43.9	5	116,586	+ 16.3
Nacogdoches	3	43,382	− 17.0	+ 36.5	3	105,201	− 25.3
Tyler	8	227,439	+ 3.9	+ 34.7	8	541,484	− 0.9
All Others	45	455,555	+ 0.5	+ 46.9	41	995,840	− 3.0
DISTRICT 6	33	994,419	+ 26.7	+ 39.9	33	2,543,780	+ 14.5
El Paso	24	928,525	+ 26.7	+ 40.9	24	2,370,907	+ 14.9
All Others	9	65,894	+ 27.0	+ 27.4	9	172,873	+ 8.4
DISTRICT 7	33	277,466	+ 10.6	+ 28.9	27	718,169	+ 7.1
San Angelo	19	213,933	+ 10.2	+ 35.3	15	552,437	+ 5.8
All Others	14	63,533	+ 11.9	+ 11.3	12	165,732	+ 11.9
DISTRICT 8	118	2,385,849	+ 11.4	+ 33.1	105	5,850,231	+ 8.0
Austin	19	431,181	+ 10.9	+ 23.4	18	1,068,825	+ 6.9
Corpus Christi	8	180,145	+ 30.9	+ 63.5	7	386,341	+ 17.7
Lockhart	5	58,643	+ 17.1	+ 79.2	5	131,066	− 11.5
San Antonio	27	1,241,671	+ 10.2	+ 35.3	24	3,129,418	+ 9.4
All Others	59	474,209	+ 8.5	+ 23.8	51	1,134,581	+ 4.7
DISTRICT 9	108	2,831,316	+ 17.9	+ 29.1	95	6,518,415	+ 11.3
Beaumont	8	175,601	+ 29.1	+ 39.0	8	426,678	+ 14.6
Galveston	10	177,568	− 13.5	+ 32.1	10	451,822	+ 11.9
Houston	50	2,054,842	+ 18.2	+ 27.4	42	4,655,359	+ 12.3
Port Arthur	12	171,611	+ 46.5	+ 38.0	12	426,948	+ 27.3
All Others	28	251,694	− 0.3	+ 28.9	23	557,608	− 6.5
DISTRICT 10	53	326,940	+ 17.5	+ 21.6	45	813,808	+ 10.2
Brownsville	16	90,927	+ 24.1	+ 13.4	15	236,648	+ 17.5
Harlingen	12	79,511	+ 15.5	+ 54.6	7	154,843	− 3.2
All Others	25	156,502	+ 15.0	+ 14.0	23	422,317	+ 12.0

See map on page 11 of the issue of March 27, 1937, showing crop reporting districts.

NOTE: Prepared from reports from independent retail stores to the Bureau of Business Research, cooperating with the United States Department of Commerce.

this 5-year period (1931–35) the amount of oil discovered in Texas was nearly 4 times that found in Oklahoma and nearly 16 times that discovered in California.

From 1921 through 1935 there were discovered in Texas 54 fields which have produced, or which apparently will produce, 20 million barrels or more of oil; during the same 15-year period 24 such fields were discovered in Oklahoma and 23 in California. At the close of 1935 Texas had 71 such fields out of a total of 196 for the entire United States.

The position of Texas in the oil industry is a function of the size of the State and of its geology. Oil in Cali-

CREDIT RATIOS IN TEXAS RETAIL STORES FOR THE YEARS 1936 AND 1935

	Ratio of Cash and Credit Sales to Total Net Sales						Ratio of Monthly Collections to Outstandings (Average for Year)						Ratio of Bad Debt Losses to Credit Sales					
							Open Credit			Installment Credit			Open Credit			Installment Credit		
	No. of Stores	Cash 1936	Cash 1935	Open Credit 1936	Open Credit 1935	Installment Credit 1936	Installment Credit 1935	No. of Stores	1936	1935	No. of Stores	1936	1935	No. of Stores	1936	1935	No. of Stores	1936	1935
AUSTIN	14	37.0	37.7	51.2	51.1	11.7	11.3	13	44.9	43.2	1	*	*	14	0.7	0.8	2	*	*
BEAUMONT	7	15.2	15.4	46.0	47.2	38.8	37.4	4	56.1	40.8	3	6.5	6.6	6	1.6	1.8	3	1.8	3.0
DALLAS	24	35.8	35.7	50.1	50.8	14.1	13.4	20	42.7	39.5	13	14.1	13.4	20	0.5	0.4	11	0.8	0.8
Automobile Dealers	3	68.6	72.0	7.5	4.9	23.9	23.0	3	80.9	61.8	3	33.4	†	3	1.5	2.9	3	0.0	0.0
Department Stores	3	35.4	34.6	50.0	52.1	14.6	13.3	4	46.5	42.6	4	16.4	16.4	3	0.3	0.3	3	0.5	0.2
Furniture Stores	4	10.0	7.8	4.9	7.0	85.2	85.2	1	*	*	4	10.5	9.7	1	*	*	3	1.3	1.5
Women's Specialty Stores	4	28.7	28.1	70.6	71.9	0.7	0.0	4	37.6	34.3	1	*	*	4	0.6	0.2	1	*	*
All Other Stores	10	24.9	23.2	60.8	62.5	14.3	14.3	8	41.6	40.4	1	*	*	9	0.7	0.7	1	*	*
EL PASO	23	30.9	31.5	43.6	45.3	25.5	23.2	9	42.4	40.2	10	11.0	10.7	11	0.2	0.7	11	2.0	3.9
Furniture Stores	9	11.0	11.3	12.1	12.3	76.9	76.3	0	.....	.....	8	11.1	10.7	0	.....	.....	8	2.2	4.9
Grocery Stores	6	41.0	45.7	59.0	54.3	0.0	0.0	4	97.5	90.6	0	.....	.....	6	0.3	0.7	0	.....	.....
All Other Stores	8	38.2	36.7	55.3	57.2	6.5	6.1	5	38.2	36.5	2	*	*	5	0.2	0.7	3	1.5	1.0
FORT WORTH	13	36.6	36.4	48.4	49.7	15.0	13.9	9	36.2	33.9	7	10.9	9.8	9	0.8	0.9	8	1.6	2.3
Department Stores	4	42.3	41.8	52.4	54.3	5.3	4.0	4	35.8	34.2	3	10.6	10.4	4	0.7	0.9	3	0.2	0.3
Furniture Stores	3	9.4	9.5	34.6	31.2	56.0	59.3	2	*	*	3	10.5	9.1	2	*	*	3	1.9	2.6
All Other Stores	6	20.1	21.4	30.5	31.4	49.4	47.2	3	33.7	30.8	1	*	*	3	1.1	1.6	2	*	*
GALVESTON	12	22.6	23.5	38.8	42.7	38.6	33.8	7	41.5	36.6	5	13.3	11.0	9	0.7	0.9	5	0.6	1.2
HOUSTON	27	35.3	37.1	52.5	51.6	12.2	11.3	18	44.3	41.0	4	12.5	11.7	24	0.7	0.8	6	0.5	0.5
Department Stores	4	39.9	41.7	56.8	54.8	3.3	3.5	3	43.0	41.5	1	*	*	3	0.4	0.5	2	*	*
Grocery Stores	4	25.8	27.0	74.2	73.0	0.0	0.0	1	*	*	0	.....	.....	4	1.1	1.0	0	.....	.....
Lumber and Building Material Dealers	3	5.9	8.6	94.1	91.4	0.0	0.0	2	*	*	0	.....	.....	3	3.8	1.6	0	.....	.....
Men's Clothing Stores	6	37.1	38.7	62.9	61.3	0.0	0.0	6	38.0	34.3	0	.....	.....	6	1.1	1.6	0	.....	.....
All Other Stores	10	24.0	24.7	26.1	27.8	49.9	47.5	6	54.7	47.4	3	12.0	11.2	8	0.7	0.9	4	0.6	0.6
SAN ANTONIO	24	30.2	30.8	39.9	41.5	29.8	27.7	12	45.0	42.5	7	10.9	9.8	20	1.5	2.7	8	1.0	0.9
Furniture Stores	5	7.1	6.8	19.9	19.6	73.0	73.6	2	*	*	4	10.4	9.0	3	6.4	6.7	5	1.0	0.9
Grocery Stores	12	49.5	46.7	50.5	53.3	0.0	0.0	4	81.7	83.5	0	.....	.....	11	1.9	2.4	0	.....	.....
All Other Stores	7	41.7	42.3	50.2	52.2	8.1	5.5	6	44.6	42.6	3	12.4	13.4	6	0.4	2.0	3	1.0	1.0
ALL OTHER CITIES	22	43.5	43.8	54.4	52.4	2.1	3.8	22	36.1	32.2	0	.....	.....	22	1.9	1.5	0	.....	.....
STATE	166	34.5	35.0	48.4	49.0	17.1	16.0	114	41.9	38.6	50	12.0	11.1	135	0.8	1.0	54	1.0	1.3
Automobile Dealers	6	52.6	57.6	8.9	6.6	38.5	35.8	6	79.9	68.4	5	20.1	19.9	7	0.8	1.2	6	0.1	0.2
Automobile Tires and Accessory Stores	4	27.2	28.6	70.0	69.0	2.8	2.5	3	49.4	45.7	0	.....	.....	2	*	*	0	.....	.....
Coal and Wood Dealers	5	42.8	41.1	57.2	58.9	0.0	0.0	4	59.8	56.7	0	.....	.....	5	1.0	1.4	0	.....	.....
Department Stores	28	39.4	39.6	53.4	54.2	7.3	6.2	28	41.2	38.4	11	14.9	15.1	27	0.6	0.9	11	0.5	0.3
Furniture Stores	27	7.6	7.5	17.0	16.8	75.4	75.7	6	37.3	29.8	24	10.7	9.7	7	4.4	4.8	24	1.2	1.5
Grocery Stores	34	36.9	36.4	63.1	63.6	0.0	0.0	19	61.0	57.6	0	.....	.....	33	0.9	1.0	0	.....	.....
Hardware Stores	6	39.4	31.5	60.6	68.5	0.0	0.0	2	*	*	0	.....	.....	6	0.4	0.6	0	.....	.....
Heating and Plumbing Stores	3	1.9	3.0	98.1	97.0	0.0	0.0	3	47.5	39.9	0	.....	.....	3	0.6	0.2	0	.....	.....
Household Appliance Stores	10	6.8	6.7	9.1	7.4	84.1	85.8	8	90.4	95.7	2	*	*	9	3.0	1.0	3	0.4	0.3
Jewelry Stores	9	24.4	23.1	22.9	23.7	52.7	53.2	4	39.4	34.4	3	15.5	13.8	4	1.2	1.6	5	3.6	4.6
Lumber and Building Material Dealers	8	7.0	7.7	88.0	86.1	5.0	6.2	7	59.3	47.8	2	*	*	8	2.5	1.7	2	*	*
Men's Clothing Stores	13	32.7	32.5	66.9	67.1	0.4	0.4	12	40.1	37.7	1	*	*	12	0.7	0.9	1	*	*
Shoe Stores	3	42.1	41.2	57.9	58.8	0.0	0.0	3	42.4	39.2	0	.....	.....	3	0.6	0.8	0	.....	.....
Women's Specialty Stores	10	33.0	32.5	64.6	65.6	2.4	1.9	9	38.2	35.2	2	*	*	9	0.6	0.3	2	*	*

*Less than three (3) stores reporting; no ratio can be shown without disclosing confidential information.

†Collections, including down payments, exceed outstandings.

NOTE: Prepared from reports from Texas retail stores to the Bureau of Business Research, coöperating with the United States Department of Commerce. The ratios shown for each year, in the order in which they appear from left to right, are obtained by the following computations:

(1) RATIO OF CASH SALES TO TOTAL NET SALES is obtained by dividing net cash sales by total net sales.

(2) RATIO OF OPEN CREDIT SALES TO TOTAL NET SALES is obtained by dividing net sales on open credit by total net sales. Open credit sales are those made on usual customers' charge accounts.

(3) RATIO OF INSTALLMENT CREDIT SALES TO TOTAL NET SALES is obtained by dividing net sales on installment credit, or deferred payment credit, by total net sales. Installment credit sales are all sales made under arrangements for payment in installments at more or less regular intervals. As used in the ratio under consideration, they include all installment sales—sales transferred to finance companies, those not transferred to finance companies, and down payments made on the purchases.

(4) and (5) RATIO OF MONTHLY COLLECTIONS TO OUTSTANDINGS (Average for Year) is obtained by dividing the average amount collected during each month of the year by the average amount outstanding on the first of each month of the year. Outstandings are the total accounts unpaid on the first of the month. Collections are the amounts of those accounts which are collected during the month. In the case of the ratios shown for installment credit, the collections figures include down payments and deposits.

(6) and (7) RATIO OF BAD DEBT LOSSES TO CREDIT SALES is obtained by dividing net losses from bad debts by credit sales on open credit or on installment credit. Net losses are the gross amount of accounts which, at the end of a particular year, are considered worthless (which are, for that reason, charged as bad debts to the profit and loss account) minus the amount recovered during the year on accounts previously considered worthless. In the case of the ratios shown for installment credit, the installment credit sales figures used include only those sales not transferred to finance companies and down payments; they do not include sales transferred to finance companies.

fornia is restricted geographically to rather limited areas of geologically young rocks. Oil in Oklahoma has been found in rather restricted areas and production comes from geologically old rocks. By way of contrast, oil in Texas is found over a very large proportion of the State and the producing strata include geologically young, middle-aged, and old rocks. With regard to the prolific nature of Texas petroleum resources, Dr. Hill wrote in 1932: "'Texas bragging' is a habit which can be overdone, but not so when it comes to a consideration of the vast number of its geologic horizons, their wide range in geologic time, and the number and variety of the oil horizons that they contain."

Texas apparently occupies an even more favorable relative position with reference to natural gas than it does to petroleum. If properly conserved, developed, and used in Texas, the vast supplies of natural gas may well be the key factors in the further expansion of various lines of manufacturing in the State. It is obvious that the greater the development of those manufacturing enterprises, for which Texas possesses outstanding economic advantages, the greater will be the volume of pay rolls and other means of income within the State. It is less obvious, but true, that any large and new economic expansion which Texas may have in the near future is dependent largely upon utilizing its superb natural gas resources for the further development of its numerous other natural resources and advantages. And as the buying power of the thirteen millions and more of people in the Gulf Southwest increases, as it may well do if the natural resources are effectively developed, the expanding markets within the region itself will call into being an ever-widening series of complementary industries and occupations to meet these demands.

ELMER H. JOHNSON.

MARCH CARLOAD MOVEMENT OF POULTRY AND EGGS

	Cars of Poultry								Cars of Eggs	
	Live				Dressed					
	Chickens		Turkeys		Chickens		Turkeys			
	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936
Shipments from Texas Stations										
TOTAL	9	9			64	44	11		143	155
Intrastate	4	3			1				49	15
Interstate	5	6			63	44	11		94	140
Receipts at Texas Stations										
TOTAL									30	29
Intrastate									30	22
Interstate										7

NOTE: These data are furnished the U. S. Department of Agriculture, Division of Crop and Livestock Estimates, by railway officials through agents at all stations which originate and receive carload shipments of poultry and eggs. The data are compiled by the Bureau of Business Research.

TEXAS COMMERCIAL FAILURES

	March 1937	March 1936†	Feb. 1937	First Quarter 1937	First Quarter 1936†
Number	7	10	14	34	62
Liabilities‖	$101	$130	$159	$317	$626
Assets‖	$ 32	$ 49	$ 93	$145	$202
Average Liabilities per Failure‖	$ 14	$ 13	$ 11	$ 9	$ 10

†Revised.
‖In thousands.
NOTE: From Dun and Bradstreet, Inc.

COMMODITY PRICES

	March 1937	March 1936	Feb. 1937
WHOLESALE PRICES:			
U. S. Bureau of Labor Statistics (1926 = 100)	87.3	79.6	86.3
The Annalist (1913 = 100)	143.5 / 84.8¶	124.9 / 73.6¶	139.4 / 82.3¶
FARM PRICES:			
U. S. Department of Agriculture (1910–14 = 100)	128.9	104.0	127.0
U. S. Bureau of Labor Statistics (1926 = 100)	94.1	76.5	91.4
RETAIL PRICES:			
Food (U. S. Bureau of Labor Statistics, 1923–25 = 100)	85.4	79.5	84.5
Department Stores (Fairchild's Publications, Jan. 1931 = 100)	94.5	88.1	93.7

¶Based on old gold dollar.

PETROLEUM

Daily Average Production

(In Barrels)

	March 1937	March 1936	Feb. 1937
East Central Texas	119,710	49,650	107,600
East Texas	454,310	440,200	450,950
Gulf Coast¶	206,940	227,650	189,800
North Texas	67,840	57,100	67,000
Panhandle	76,380	63,050	74,150
Southwest Texas	228,070	73,050	215,050
West Central Texas	32,550	24,950	32,350
West Texas	206,120	174,600	185,400
STATE	1,391,920	1,110,250	1,322,300
UNITED STATES	3,394,690	2,819,800	3,274,700
Imports	168,972	147,179	98,000

¶Includes Conroe.
NOTE: From American Petroleum Institute.
See accompanying map showing the oil producing districts of Texas.

Gasoline sales as indicated by taxes collected by the State Comptroller were: February 1937, 84,611,000 gallons; February 1936, 73,751,000 gallons; January 1937, 79,939,000 gallons.

TEXAS CHARTERS

	March 1937	March 1936	Feb. 1937	First Quarter 1937	First Quarter 1936†
Domestic Corporations:					
Capitalization‖	$2,048	$2,581	$2,135	$6,173	$6,839
Number	143	173	130	401	466
Classification of new corporations:					
Banking-Finance	9	10	6	20	21
Manufacturing	12	21	20	60	59
Merchandising	33	17	10	101	115
Oil	36	43	30	97	127
Public Service	5	1	1	6	6
Real Estate-Building	15	8	9	34	32
Transportation	2	3	4	10	10
All Others	31	10	20	76	95
Number capitalized at less than $5,000	51	69	44	134	182
Number capitalized at $100,000 or more	1	8	1	11	15
Foreign Corporations (Number)	27	27	30	99	91

†Revised.
‖In thousands.
NOTE: Compiled from records of the Secretary of State.

LUMBER

(In Board Feet)

	March 1937	March 1936	Feb. 1937
Southern Pine Mills:			
Average Weekly Production per Unit	324,536	306,197	320,289
Average Weekly Shipments per Unit	308,977	330,446	365,602
Average Unfilled Orders per Unit, End of Month	834,970	873,312	943,184

NOTE: From Southern Pine Association.

STOCK PRICES

	March 1937	March 1936	Feb. 1937
Standard Indexes of the Securities Markets:			
419 Stocks Combined	129.9	108.7	129.5
347 Industrials	152.6	124.6	151.7
32 Rails	62.8	49.2	57.9
40 Utilities	105.7	102.8	110.7

NOTE: From Standard Statistics Co., Inc.

CONSUMPTION OF ELECTRIC POWER IN TEXAS

	Power Consumed (In Thousands of K.W.H.)					Percentage Change		
	March 1937	March 1936	Feb. 1937	First Quarter 1937	First Quarter 1936	Mar. 1937 from Mar. 1936	Mar. 1937 from Feb. 1937	First Quarter 1937 from First Quarter 1936
Commercial	36,028	30,887	36,652	95,162	82,365	+ 16.6	— 1.7	+ 15.5
Industrial	90,791	80,825	83,518	222,287	193,430	+ 12.3	+ 8.7	+ 14.9
Residential	26,758	22,812	28,040	73,237	62,574	+ 17.3	— 4.6	+ 17.0
All Other	22,633	20,256	23,273	59,626	52,871	+ 11.7	— 2.7	+ 12.8
TOTAL	176,210	154,780	171,483	450,312	391,240	+ 13.8	+ 2.8	+ 15.1

NOTE: Prepared from reports from electric power companies to the Bureau of Business Research. The figures for March 1937, March 1936, and February 1937, include reports from 17 companies; those for each quarter, 16 companies.

BANKING STATISTICS

(In Millions of Dollars)

	March 1937		March 1936		February 1937	
	Dallas District	United States	Dallas District	United States	Dallas District	United States
DEBITS to individual accounts	808	39,754	859*	46,377*	754	37,236
Condition of reporting member banks on—	March 31, 1937		April 1, 1936		March 3, 1937	
ASSETS:						
Loans and investments—total	490	22,273	445	21,621	482	22,718
Loans to brokers and dealers:						
In New York City		1,064		990		1,024
Outside New York City	3	241	2	220	3	239
Loans on securities to others (except banks)	43	2,051	41	2,103	43	2,017
Acceptances and commercial paper bought	2	410	2	352	2	415
Loans on real estate	23	1,157	21	1,144	23	1,149
Loans to banks		81	1	88		86
Other loans	146	4,362	124	3,495	139	4,191
U. S. Government direct obligations	185	8,396	172	8,643	184	9,067
Obligations fully guaranteed by U. S. Government	30	1,199	35	1,265	30	1,208
Other securities	58	3,312	47	3,321	58	3,322
Reserve with Federal Reserve Banks	103	5,173	77	3,866	111	5,171
Cash in vault	9	346	9	356	10	374
Due from domestic banks	154	1,886	162	2,198	169	2,055
Other assets—net	30	1,350	27	1,353	28	1,367
LIABILITIES:						
Demand deposits—adjusted	392	15,126	324	13,578	386	15,501
Time deposits	120	5,144	118	4,909	120	5,167
U. S. Government deposits	12	353	27	774	18	340
Inter-bank deposits:						
Domestic banks	176	5,462	171	5,430	193	5,815
Foreign banks		453		374		422
Borrowings		6		22		2
Other liabilities	6	903	4	789	5	860
Capital account	79	3,581	76	3,518	78	3,578

*Five weeks.
NOTE: From Federal Reserve Board.
Debits for the Dallas Federal Reserve District during the first quarter of 1937 were $2,609,791,000 as compared with $2,182,852,000 for the same period of 1936. Debits for all Federal Reserve Districts during the first quarter of 1937 were $126,896,228,000 as compared with $113,586,083,000 for the same period of 1936.

MARCH SHIPMENTS OF LIVESTOCK CONVERTED TO A RAIL-CAR BASIS§

	Cattle		Calves		Hogs		Sheep		Total	
	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936
Total Interstate Plus Fort Worth¶	3,302	2,832	505	451	898	916	526	203	5,231	4,402
Total Intrastate Omitting Fort Worth	481	554	111	97	42	40	44	17	678	708
TOTAL SHIPMENTS	3,783	3,386	616	548	940	956	570	220	5,909	5,110

TEXAS CAR-LOT§ SHIPMENTS OF LIVESTOCK, JANUARY 1 TO APRIL 1

	Cattle		Calves		Hogs		Sheep		Total	
	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936
Total Interstate Plus Fort Worth¶	9,220	8,826	1,742	1,579	2,437	2,111	1,133	629	14,532	13,145
Total Intrastate Omitting Fort Worth	1,395	1,906	412	346	169	60	147	67	2,123	2,379
TOTAL SHIPMENTS	10,615	10,732	2,154	1,925	2,606	2,171	1,280	696	16,655	15,524

§Rail-car Basis: Cattle, 30 head per car; calves, 60; hogs, 80; and sheep, 250.
¶Fort Worth shipments are combined with interstate forwardings in order that the bulk of market disappearance for the month may be shown.
NOTE: These data are furnished the United States Bureau of Agricultural Economics by railway officials through more than 1,500 station agents, representing every livestock shipping point in the State. The data are compiled by the Bureau of Business Research.

COTTON BALANCE SHEET IN THE UNITED STATES AS OF APRIL 1

(In Thousands of Bales)

	Carryover Aug. 1§	Imports to April 1¶	Final Ginnings Report March 20§	Total	Consumption to April 1§	Exports to April 1§	Total	Balance April 1
1929–1930	2,313	244	14,548	17,105	4,316	5,771	10,087	7,018
1930–1931	4,530	52	13,756	18,338	3,384	5,518	8,902	9,436
1931–1932	6,369	66	16,629	23,064	3,566	6,852	10,418	12,646
1932–1933	9,682	88	12,710	22,480	3,749	6,085	9,834	12,646
1933–1934	8,176	100	12,664	20,940	3,945	6,098	10,043	10,897
1934–1935	7,746	74	9,472	17,292	3,034	3,573	6,607	10,685
1935–1936	7,138	90	10,420	17,648	4,081	4,814	8,895	8,753
1936–1937	5,397	139	12,130	17,666	5,292	4,365	9,657	8,009

§The cotton year begins August 1. ¶In 500-pound bales. §In running bales, counting round bales as half bales.
NOTE: The figures have been revised in accordance with the revisions made by the United States Bureau of the Census.

POSTAL RECEIPTS

	March 1937	March 1936	Feb. 1937	First Quarter 1937	First Quarter 1936
Abilene	$ 16,857	$ 14,187	$ 14,696	$ 48,233	$ 42,633
Amarillo	29,953	24,650	25,993	83,128	75,704
Austin	66,801	45,245	55,025	176,607	135,345
Beaumont	24,874	20,797	20,207	68,241	61,336
Big Spring	5,892	4,545	4,169	15,309¶	‡
Brownsville	8,211	5,844	5,471	19,776	16,785
Brownwood	5,151	4,557	5,180	16,225	14,982
Corpus Christi	21,241	13,649	18,403	59,202	43,127
Dallas	385,263	334,299	331,864	1,049,944	976,747
Del Rio	4,283	3,900	4,265	14,266	11,869
Denison	4,777	3,967	4,214	13,435	12,738
El Paso	47,224	38,616	39,927	131,367	114,671
Fort Worth	157,228	135,397	131,260	420,271	376,350
Galveston	28,542	24,339	24,456	77,858	72,492
Graham	2,124	1,642	1,934	6,226	5,411
Harlingen	5,883	4,857	4,659	15,607	13,245
Houston	235,555	194,671	198,904	646,481	574,854
Jacksonville	3,182	2,781	2,616	8,982	8,950
Longview	9,729	8,961	8,252	28,036	26,095
Lubbock	13,857	11,843	12,567	39,477	36,288
McAllen	4,857	3,661	3,541	12,387	11,112
Marshall	5,248	5,240	5,050	15,742	15,602
Palestine	4,873	4,299	7,427	17,547	16,587
Pampa	5,912	5,451	5,809	18,644	17,786
Paris	6,312	5,080	5,802	17,576	15,581
Port Arthur	11,519	9,331	10,842	33,458	29,535
San Angelo	10,938	10,116	9,669	31,599	30,154
San Antonio	125,953	112,810	104,646	339,209	322,211
San Benito	3,251	2,476	2,623	8,459	7,308
Sherman	7,303	6,127	6,537	20,770	19,070
Snyder	1,377	1,224	1,254	4,037	3,851
Sweetwater	4,807	3,741	4,506	14,521	13,309
Tyler	17,072	14,473	15,101	48,266	45,629
Waco	34,468	29,999	26,124	91,692	87,982
Wichita Falls	21,565	18,206	18,011	61,932	58,405
TOTAL	$1,342,082	$1,210,981	$1,141,004	$3,659,201	$3,313,744

NOTE: Compiled from reports from Texas chambers of commerce to the Bureau of Business Research.
‡Not available.
¶Not included in total.

MARCH CREDIT RATIOS IN TEXAS RETAIL STORES

(Expressed in Per Cent)

	Number of Stores Reporting	Ratio of Credit Sales to Net Sales 1937	1936	Ratio of Collections to Outstandings 1937	1936	Ratio of Credit Salaries to Credit Sales 1937	1936
All Stores	56	63.0	63.2	39.0	36.6	1.2	1.3
Stores Grouped by Cities:							
Abilene	4	62.1	57.1	36.3	34.5	1.6	1.8
Austin	3	59.0	59.4	43.6	39.9	1.1	1.1
Dallas	9	69.4	67.9	40.6	36.3	1.1	1.2
Fort Worth	5	59.7	60.4	34.2	33.2	1.5	1.5
Galveston	3	71.6	66.7	43.5	37.4	2.2	3.0
Houston	8	61.8	64.7	42.7	40.4	1.4	1.6
San Antonio	3	56.7	60.7	30.7	36.6	*	*
Waco	4	66.1	60.8	38.5	34.7	1.2	1.4
All Others	17	58.2	58.0	40.5	36.7	1.4	1.7
Stores Grouped According to Type of Store:							
Department Stores (Annual Volume Over $500,000)	16	61.6	62.1	38.0	36.4	1.2	1.2
Department Stores (Annual Volume Under $500,000)	13	62.6	59.7	38.2	36.4	1.7	1.7
Dry Goods-Apparel Stores	4	60.1	59.8	32.7	29.9	1.8	2.0
Women's Specialty Shops	9	65.8	67.3	42.0	37.9	0.9	1.1
Men's Clothing Stores	14	68.3	67.3	41.4	37.0	1.7	2.0
Stores Grouped According to Volume of Net Sales During 1934:							
Over $2,500,000	8	67.2	66.2	40.8	37.9	0.9	1.0
$2,500,000 down to $1,000,000	8	61.8	61.2	38.2	34.9	1.2	1.4
$1,000,000 down to $300,000	17	61.7	58.6	45.3	42.5	1.4	1.6
Less than $300,000	23	67.6	63.2	37.9	36.7	2.2	2.7

*Ratio cannot be shown because of insufficient number of stores reporting.

NOTE: The ratios shown for each year, in the order in which they appear from left to right, are obtained by the following computations: (1) Credit sales divided by net sales. (2) Collections during the month divided by the total accounts unpaid on the first of the month. (3) Salaries of the credit department divided by credit sales.

The data are reported to the Bureau of Business Research by Texas retail stores.

BUILDING PERMITS

	Mar. 1937	Mar. 1936	Feb. 1937	First Quarter 1937	First Quarter 1936
Abilene	$ 29,380	$ 18,942	$ 20,982	$ 86,083	$ 34,467
Amarillo	59,957	54,111	93,662	199,597	140,740
Austin	290,292	241,230	266,254	776,638	962,786¶
Beaumont	181,039	112,784	117,800	341,099	368,147¶
Big Spring	22,360	12,540	17,370	45,283	20,320
Brownsville	1,275	6,545	8,700	29,900	21,008
Brownwood	2,465	250	900	5,965	675
Cleburne	1,275	2,320	5,220	‡	8,370§
Corpus Christi	208,560	134,542	247,726	734,924	517,132
Corsicana	14,010	10,835	4,765	26,075	17,351
Dallas	1,501,058	1,465,167	857,814	3,270,858	5,088,574
Del Rio	5,065	9,168	5,043	19,058	14,418
El Paso	78,774	37,303	117,998	316,121	133,567
Fort Worth	1,642,244	660,848	275,805	2,198,280	1,528,223
Galveston	77,652¶	143,240	99,937	328,506¶	187,814
Graham	25,275	4,550	22,330	62,655¶	66,550
Harlingen	55,245	4,659	31,560	101,530¶	9,289
Houston	1,628,865	2,570,890	1,347,210	5,882,680	7,093,549
Jacksonville	7,325	7,725	61,150	68,475	26,485
Laredo	29,450	1,010	675	41,475	5,535
Lubbock	91,602	70,117	60,710	225,724	258,610
McAllen	32,650	9,025	16,600	94,600	48,475
Marshall	33,126	16,925	34,990	86,881	35,479
Palestine	22,133	28,364	13,745	42,983	48,394
Pampa	19,850	23,950	31,090	79,940¶	44,390¶
Paris	10,440	6,445	3,265	15,260	18,445
Plainview	15,720	.....	1,345	19,475	.....
Port Arthur	107,093	135,601	82,465	241,682	209,354
San Angelo	30,890	15,670	12,270	70,978	40,618
San Antonio	507,497	223,780	578,339	1,405,845¶	617,181¶
Sherman	10,777	10,500	15,404	39,027	22,780
Snyder	.....	.....	.....	5,350	3,500
Sweetwater	23,025	5,255	5,350	38,931	12,881
Tyler	98,752	423,692	122,925	300,887	583,410
Waco	113,420	54,938	51,695	204,161	122,587
Wichita Falls	18,734	12,858	24,870	52,554	44,428
TOTAL	$ 6,997,275	$ 6,535,779	$ 4,657,964	$17,459,480	$18,347,162

‡Not available.
§Not included in total.
¶Does not include public works.
NOTE: Compiled from reports from Texas chambers of commerce to the Bureau of Business Research.

MARCH EMPLOYMENT AND PAY ROLLS IN TEXAS CLASSIFIED BY CITIES AND EMPLOYMENT GROUPS

Pay Rolls Ending Nearest Fifteenth of Month

	No. of Establishments	Workers: Number Mar. 1937	Workers: Percentage Change from Mar. 1936	Workers: Percentage Change from Feb. 1937	Pay Roll: Dollars Mar. 1937	Pay Roll: Percentage Change from Mar. 1936	Pay Roll: Percentage Change from Feb. 1937	Average Weekly Wage per Worker: Mar. 1937	Mar. 1936	Feb. 1937
Abilene	21	316	+ 8.2	+ 1.9	$ 6,870	+ 7.1	+ 6.6			
Amarillo	28	875	+ 11.3	− 2.6	23,542	+ 23.5	+ 5.4			
Austin	21	537	+ 11.6	+ 1.1	11,056	+ 9.4	+ 4.9			
Beaumont	38	3,276	− 3.3	+ 4.8	82,533	+ 5.5	+ 4.2			
Dallas	198	12,259	+ 10.0	+ 0.5	284,073	+ 15.9	+ 2.1			
Denison	9	944	+ 12.1	+ 6.5	13,650	+ 6.4	+ 10.9			
El Paso	74	2,424	+ 18.4	+ 1.3	50,816	+ 23.0	+ 3.2			
Fort Worth	105	7,702	+ 16.5	+ 3.4	170,822	+ 29.9	+ 13.3			
Galveston	18	660	+ 18.1	+ 5.8	17,003	+ 20.7	+ 7.9			
Houston	170	12,226	+ 15.0	+ 0.8	291,523	+ 21.0	+ 2.4			
Laredo	13	210	+ 17.3	− 1.4	2,925	+ 9.6	− 0.5			
Port Arthur	10	7,795	+ 1.6	+ 2.1	216,435	+ 9.9	+ 4.9			
San Antonio	149	4,243	+ 9.0	+ 2.4	86,037	+ 9.8	+ 5.0			
Sherman	14	683	+ 1.9	+ 2.4	11,332	+ 3.4	+ 9.7			
Waco	40	1,730	+ 20.1	− 0.1	32,195	+ 25.2	+ 1.9			
Wichita Falls	33	907	+ 9.9	+ 3.1	20,884	+ 13.3	+ 3.1			
All Other Cities	825	33,329	+ 9.3	+ 1.7	854,301	+ 16.8	+ 4.9			
STATE	1,753	89,906	+ 10.0	+ 1.7	2,173,072	+ 16.7	+ 4.8	$24.17	$22.77	$23.47
BUILDING MATERIALS	104	8,682	+ 16.4	+ 2.9	167,044	+ 21.7	+ 5.9	19.24	18.40	18.69
Brick, Tile, Terra Cotta	10	430	+ 1.9	− 0.5	5,354	− 15.4	− 4.4	12.45	15.00	12.96
Cement	8	1,445	+ 28.4	+ 1.0	25,295	+ 6.1	+ 0.1	17.51	21.19	17.65
Foundries, Machine Shops	30	2,221	+ 30.2	+ 3.1	58,324	+ 38.5	+ 10.3	26.26	24.69	24.45
Millwork	19	742	+ 34.2	+ 1.9	14,368	+ 37.9	+ 2.2	19.36	18.84	19.31
Saw Mills	15	3,079	+ 3.6	+ 4.9	47,659	+ 17.4	+ 8.4	15.48	13.66	14.97
Structural Iron Works	10	692	+ 13.1	0.0	14,538	+ 14.2	− 1.8	21.01	20.80	21.40
All Other Building Materials	12	73	+ 2.8	+ 9.0	1,506	+ 17.7	+ 9.4	20.63	18.01	20.55
CHEMICALS[1]	32	781	+ 13.8	+ 4.3	15,243	+ 10.0	+ 3.9	19.52	20.19	19.59
CLOTHING AND TEXTILES	38	3,820	+ 21.1	+ 1.6	47,856	+ 40.0	+ 7.2	12.53	10.84	11.87
Cotton Textile Mills	5	1,360	+ 34.0	+ 0.1	18,501	+ 79.1	+ 2.6	13.60	10.18	13.28
Men's Work Clothing Manufacturing	14	1,508	+ 5.2	+ 1.8	16,523	+ 16.6	+ 14.2	10.96	9.89	9.77
Women's Clothing Manufacturing	7	238	+ 36.0	+ 9.7	2,704	+ 44.1	+ 17.6	11.36	10.73	10.59
Other Clothing and Textile Manufacturing	12	714	+ 34.2	+ 1.7	10,128	+ 29.8	+ 3.0	14.18	14.67	14.01
COTTON	37	1,348	+ 8.0	− 12.6	22,037	+ 7.2	− 5.6	16.35	14.68	15.14
Cotton Compresses	6	746	+ 13.2	− 2.4	13,426	+ 5.6	+ 3.7	18.00	19.29	16.95
Cotton Oil Mills	31	602	+ 2.2	− 22.6	8,611	+ 9.7	− 17.1	14.30	13.33	13.36
DISTRIBUTION	681	19,326	+ 10.6	+ 1.4	407,770	+ 11.7	+ 4.4	21.10	20.90	20.49
Retail Trade	441	13,953	+ 11.5	+ 1.4	261,743	+ 13.0	+ 4.2	18.76	18.52	18.25
Wholesale Trade	240	5,373	+ 8.3	+ 1.2	146,027	+ 9.4	+ 4.6	27.18	26.91	26.29
FOOD PRODUCTS	114	7,483	+ 15.0	+ 4.6	165,121	+ 31.6	+ 13.4	22.07	19.28	20.35
Bakeries	24	708	+ 14.9	+ 0.3	14,208	+ 23.5	+ 4.6	20.07	18.67	19.24
Beverages	17	370	+ 6.3	+ 1.6	8,977	+ 12.3	+ 3.5	24.26	22.96	23.83
Confectioneries	9	252	+ 15.1	+ 2.9	3,333	+ 22.3	+ 6.8	13.23	12.45	12.74
Flour Mills	7	549	+ 6.0	− 0.9	11,369	+ 15.3	+ 0.9	20.71	19.04	20.34
Ice Cream Factories	5	259	+ 9.3	+ 5.3	5,223	+ 9.2	+ 3.1	20.17	20.19	20.60
Meat Packing, Slaughtering	9	3,498	+ 14.9	+ 8.1	91,507	+ 43.5	+ 24.6	26.16	20.93	22.68
All Other Food Products	43	1,847	+ 21.0	+ 2.6	30,504	+ 22.7	+ 0.2	16.52	16.29	16.91
FOREST PRODUCTS	22	889	+ 4.2	+ 2.3	15,313	+ 9.1	+ 0.9	17.22	16.46	17.46
FURNITURE MANUFACTURING	7	497	+ 14.8	− 3.1	9,569	+ 25.5	+ 0.9	19.25	17.61	18.49
PETROLEUM	55	23,458	+ 6.3	+ 2.2	720,875	+ 16.9	+ 4.4	30.73	27.93	30.06
Crude Petroleum Producing	23	4,942	+ 7.0	+ 4.8	179,498	+ 18.7	+ 7.5	36.32	32.75	35.41
Petroleum Refining	32	18,516	+ 6.0	+ 1.5	541,377	+ 16.3	+ 3.5	29.24	26.65	28.67
PRINTING AND PUBLISHING	52	1,703	+ 9.3	+ 2.5	54,306	+ 12.4	+ 4.7	31.89	31.01	31.21
Commercial Printing	33	557	+ 14.8	+ 3.0	14,297	+ 21.2	+ 8.6	25.67	24.33	24.34
Newspaper Publishing	19	1,146	+ 6.8	+ 2.2	40,009	+ 9.6	+ 3.4	34.91	34.03	34.52
PUBLIC UTILITIES	374	12,485	+ 7.9	+ 2.0	348,434	+ 13.5	+ 4.3	27.91	26.53	27.28
Power and Light	293	7,197	+ 12.7	+ 2.3	208,735	+ 18.8	+ 4.5	29.00	27.51	28.39
Steam Railroad Car Shops	19	2,504	− 3.9	+ 1.4	67,434	+ 0.5	+ 0.8	26.93	25.75	27.10
All Other Public Utilities	62	2,784	+ 7.7	+ 1.8	72,265	+ 12.4	+ 7.6	25.96	24.88	24.57
QUARRYING & NON-METALLIC MINING	21	1,435	− 8.1	+ 2.9	36,542	− 7.7	+ 1.1	25.46	25.34	25.92
SERVICE	120	3,704	+ 8.3	+ 1.1	52,658	+ 11.3	− 0.1	14.22	13.83	14.40
Business and Personal Service	23	300	+ 14.5	+ 2.7	7,773	+ 24.3	+ 4.1	25.91	23.86	25.56
Hotels	26	1,650	+ 12.4	+ 2.0	18,742	+ 15.1	+ 2.0	11.36	11.09	11.36
Ice	45	577	+ 4.5	− 1.7	10,048	− 0.1	− 10.9	17.41	18.22	19.21
Laundries, Dyeing and Cleaning	26	1,177	+ 3.3	+ 0.9	16,095	+ 9.3	+ 3.1	13.67	12.93	13.39
ALL OTHER INDUSTRIES	96	4,295	+ 14.3	− 1.4	110,304	+ 30.3	+ 2.3	25.68	22.52	24.76

[1] Chemical and Allied Industries not elsewhere classified.

NOTE: Prepared from reports from Texas industrial establishments to the Bureau of Business Research, coöperating with the United States Bureau of Labor Statistics.